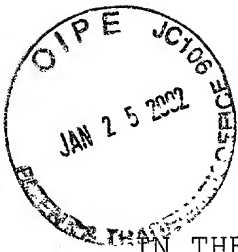


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* * *

TRANSMITTAL LETTER

The Assistant Commissioner for Patents
Washington, D.C. 20231

ATTN: BOX PATENT APPLICATION

Sir:

Transmitted herewith for filing is the patent application
of: Xiaoqiang Ma, Hisashi Kobayashi, Stuart c. Schwartz

**FOR: Expectation-Maximization-Based Channel Estimation and
Signal Detection for Wireless Communications Systems**

Enclosed are:

- [31] pages of specification, claims and abstract
- [7] sheet of formal drawings
- [x] Declaration and Power of Attorney
- [X] Assignment of the application
- [] Information Disclosure Statement

The filing fee is calculated as follows:



10057179 012502

10057179.012502

	NUMBER FILED	CLAIMS AS FILED NUMBER EXTRA	LARGE ENTITY	AMOUNT
Basic Fee	20	0	\$ 740.00	\$ 740.00
Total Claims	20	-20 =	x 20.00	
Independent Claims	2	-3 =	\$80.00	
Assignment Recording Fee			40.00	40.00
Multiple Dependent Claim Fee			270.00	

Other

TOTAL FEE \$ 780.00

- [X] Please record the accompanying Assignment.
- [X] Please charge Deposit Account No. 50-0749 in the amount of \$780.00 for filing fees.
- [] Check in the amount of \$_____ for Filing Fee.
- [X] The Assistant Commissioner for Patents is hereby authorized to charge any additional fees due or credit any overpayment to Deposit Account No. 50-0749.

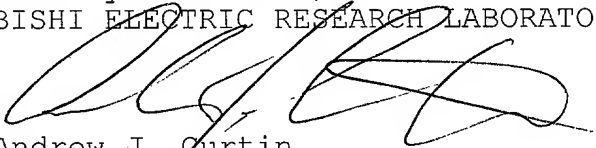
All future correspondence should be addressed to:

Patent Department
Mitsubishi Electric Research Laboratories, Inc.
201 Broadway
Cambridge, Massachusetts 02139

Duplicate copies of this letter are enclosed.

Respectfully submitted,
MITSUBISHI ELECTRIC RESEARCH LABORATORIES, INC.

By:


Andrew J. Curtin
Reg. No.: 48,485
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